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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/007,464

12/05/2001

Scott Hartop

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26889 7590 07/02/2007  
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EXAMINER

TIV, BACKHEAN

ART UNIT

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2151

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/007,464	HARTOP ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Backhean Tiv	2151	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Appeal Brief filed on 2/12/07.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**Detailed Action**

Claims 1-26 are pending in this application.

**Reopening of Prosecution After Appeal Brief or Reply Brief**

In view of the Appeal Brief filed on 2/12/2007, PROSECUTION IS  
HEREBY REOPENED. The Office Action sets forth below.

To avoid abandonment of the application, appellant must exercise one of  
the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a  
reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an  
appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal  
brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37  
CFR 41.20 have been increased since they were previously paid, then appellant must  
pay the difference between the increased fees and the amount previously paid.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13,15-22,25,26 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,502,131 issued to Vaid et al.(Vaid) in view of US Patent 6,687,224 issued to Ater et al.(Ater) in further view of US Patent 6,829,634 issued to Holt et al.(Holt).

As per claim 1, 16,25,26, Vaid teaches the method comprising (Abstract): client monitors its own bandwidth (col.3, lines 8-24, Figs.9-11); each client informing a succeeding client in the chain of that bandwidth (Figs.9-11).

Vaid however does not explicitly teach reordering its position among the clients in the chain, comparing bandwidth between two users and a method of optimizing data streaming in a peer-to-peer architecture including a plurality of clients in a chain.

Ater teaches a method of optimizing data streaming in a peer-to-peer architecture including a plurality of clients in a chain and further teaches that in the peer to peer sharing, the a peer monitors the bandwidth of another peer (Figs. 1-12, Abstract, col.4, lines 10-67).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Vaid to instead monitor and compare the bandwidth of the user in a peer to peer architecture as taught by Ater in order to control the bandwidth of users in a peer to peer network (Ater, col.4, lines 50-67).

One ordinary skill in the art would have been motivated to combine the teachings of Vaid and Ater in order to provide a system to control the bandwidth of users in a peer to peer network (Ater, col.4, lines 50-67).

Vaid in view of Ater however does not explicitly teach reordering position among the clients in a chain.

Holt teaches reordering position among the clients in a chain(Figs. 4A-6B).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Vaid in view of Ater to reorder position among clients in the chain at as taught by Holt in order to have a reliable communication network that is suitable for the simultaneous sharing of information among a large number of processes(Holt, col.2, lines 40-45).

One ordinary skill in the art at the time of the invention would have been motivated to combine the teachings of Vaid, Ater, and Holt in order to provide a reliable communication network that is suitable for the simultaneous sharing of information among a large number of processes(Holt, col.2, lines 40-45).

As per claim 2, wherein each client identifies a preceding client in the chain to the succeeding client in the chain (Vaid, Figs. 9-11).

As per claim 3, wherein a detecting client detects that its bandwidth is greater than that of the preceding client in the chain and, in response, opens a connection with a client upstream of the preceding client (Vaid, Figs. 9-11, Holt, col.7, lines 55-col.8, line 65). Motivation to combine set forth in claim 1.

As per claim 4, wherein the detecting client identifies a succeeding client in the chain to the preceding client in the chain (Vaid, Figs. 9-11, Holt, col.7, lines 55-col.8, line 65). Motivation to combine set forth in claim 1.

As per claim 5, wherein the preceding client opens a connection with the identified succeeding client (Vaid, Figs. 9-11, Holt, col.7, lines 55-col.8, line 65). Motivation to combine set forth in claim 1.

As per claim 6, 19, wherein the or each of the connections is opened concurrently with pre-existing connections between clients in the chain (Vaid, Figs. 9-11, Holt, col.7, lines 55-col.8, line 65). Motivation to combine set forth in claim 1.

As per claim 7, 20, wherein after the or each concurrent connection has been made to a client, the or each associated pre-existing connection to that client is dropped (Vaid, Figs. 9-11, Holt, col.7, lines 55-col.8, line 65). Motivation to combine set forth in claim 1.

As per claim 8, 21, wherein the client switches to reading local buffer memory before the pre-existing connection is dropped (Vaid, Figs. 9-11, Holt, col.7, lines 55-col.8, line 65). Motivation to combine set forth in claim 1.

As per claim 9, wherein, in the reordered chain, the detecting client receives streamed data via the connection from the client that was upstream of the preceding client (Vaid, Figs. 9-11, Holt, col.7, lines 55-col.8, line 65). Motivation to combine set forth in claim 1.

As per claim 10, wherein the detecting client sends streamed data to the preceding client (Vaid, col.2, lines 12-22). Motivation to combine set forth in claim 1.

As per claim 11,22, wherein the pre-existing connection between the preceding client and the detecting client is reversed (Vaid, Figs. 9-11, Holt, col.7, lines 55-col.8, line 65). Motivation to combine set forth in claim 1.

As per claim 12, wherein a replacement connection is opened between the preceding client and the detecting client (Vaid, Figs. 9-11, Holt, col.7, lines 55-col.8, line 65). Motivation to combine set forth in claim 1.1.

As per claim 13, in the reordered chain, the succeeding client receives streamed data via the connection from the preceding client (Vaid, col.7, lines7-21). Motivation to combine set forth in claim 1.

As per claim 15, wherein a client replenishes its local buffer memory after the chain has been reordered (Vaid, Figs. 9-11, Holt, col.7, lines 55-col.8, line 65). Motivation to combine set forth in claim 1.

As per claim 17, wherein a client includes address-providing means for receiving and storing the address of a preceding or succeeding client in the chain and providing that address to, respectively, the succeeding or preceding client in the chain (Vaid, Figs.10-12).

As per claim 18, wherein the comparison means of a client is associated with connection means for receiving the address of, and opening a connection with, a client upstream of the preceding client if the comparison means detects that the bandwidth of its associated client is greater than that of the preceding client in the chain(Vaid, Figs. 9-11, Holt, col.7, lines 55-col.8, line 65). Motivation to combine set forth in claim 1.

Claims 14,23,24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,502,131 issued to Vaid et al.(Vaid) in view of US Patent 6,687,224 issued to Ater et al.(Ater) in further view of US Patent 6,829,634 issued to Holt et al.(Holt) in further view of US Patent 5,784,527 issued to Ort.

Vaid in view of Ater in further view of Holt does not explicitly teach as per claim 14,23, wherein after the chain has been reordered, a client synchronizes a time code of data in local buffer memory with a time code of data received from a new streamed data input source before switching to data received from that source.

Ort teaches a client synchronizes a time code of data in local buffer memory with a time code of data received from a new streamed data input source before switching to data received from that source (col.2, lines 35-67).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Vaid in view of Ater in further view of Holt to synchronize the transfer of data from one terminal to another as taught by Ort in order to handle errors when transferring data(Ort, col.2, lines 35-38).

One ordinary skill in the art would have been motivated to combine the teachings of Valid, Holt, Ater, and Ort in order to provide a method to handle errors when transferring data(Ort, col.2, lines 35-38).

As per claim 24, wherein a client comprises switch means responsive to the data synchronizing means to switch to data received from the new streamed data input



source when the time codes are synchronized (Ort, col.2, lines 35-65). Motivation to combine set forth in claim 14.

### ***Response to Arguments***

Applicant's arguments, see Appeal Brief, filed 2/12/07, with respect to the rejection(s) of claim(s) 1-26 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. The prosecution of claims 1-26 is re-open.


### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (571) 272-5654. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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2151  
6/22/07

  
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SUPERVISORY PATENT EXAMINER